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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,011	02/18/2002	Joseph T. Friel	OPGA-0002	5174
23377	7590	09/08/2005	EXAMINER	
SELLERS, DANIEL R				
ART UNIT		PAPER NUMBER		
2644				

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/079,011	FRIEL ET AL.
	Examiner Daniel R. Sellers	Art Unit 2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 18 February 2002.

2a)  This action is FINAL.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-28 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 18 February 2002 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.  
\_\_\_\_\_

## DETAILED ACTION

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not include the inventor's signatures.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "46" has been used to designate both the antenna in figures 1-4 and the wireless Internet antenna in figure 5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the

description: 140. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "said digital storage device" in claim 11 is used by the claim to

mean "nonvolatile digital storage device", while the accepted meaning is "volatile storage device." The term is indefinite because the specification does not clearly redefine the term.

Furthermore, the limitation in claim 11 recites that SDRAM, a volatile memory, is used for the nonvolatile memory. This limitation will be interpreted to mean that the SDRAM, a volatile memory, will be used with a battery backup to mimic a nonvolatile memory device, however if the battery backup is removed from the circuit then the "nonvolatile" memory will exhibit its volatile nature and lose the information stored therein.

#### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 10, 12, 14, 15, 19-21, 24, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Beckert et al., U.S. Patent No. 6,009,363 (hereinafter Beckert).

9. Regarding claim 10, see Beckert,

*An audio system for use in a vehicle for the playback of audio data by a sound amplification system of the vehicle, the audio system comprising:*

*(a) a nonvolatile digital storage device that stores the audio data for playback; (Col. 2, lines 20-24)*

*(b) an audio playback device that reads the audio data from the digital storage device and converts it to a form which can be output to the vehicle's sound amplification system; (Col. 3, lines 23-28)*

*(c) a first audio acquisition device that receives the audio data to be stored in the digital storage device, said first audio acquisition device including a radio receiver/demodulator that receives broadcast audio signals and stores the received audio signals in said digital storage device; and (Col. 2, lines 59-64)*

*(d) a second audio acquisition device comprises a radio receiver that receives audio data transmitted wirelessly to said audio system from a nearby computer or media server and stores the received audio data in the digital storage device. (Col. 5, lines 9-12 and Col. 5, line 63 – Col. 6, line 6)*

Beckert teaches these features in an audio system in a vehicle.

10. Regarding claim 12, the further limitation of claim 10, see the preceding argument with respect to claim 10. Beckert teaches an integrated system to be mounted in a dashboard or other suitable location.

11. Regarding claim 14, the further limitation of claim 10, see Beckert

*... wherein said first audio acquisition device comprises a radio receiver that receives broadcast digital signals from a wireless Internet connection and stores the received broadcast digital signals in said digital storage device. (Col. 5, lines 9-12)*

Beckert teaches the ability to send data, or audio data, over a wireless Internet connection.

12. Regarding claim 15, the further limitation of claim 10, see Beckert

*... wherein said first audio acquisition device comprises a radio receiver that receives broadcast analog audio signals from a radio broadcast station, converts the received audio signals into digital audio signals, and encodes the digital audio signals for storage in said digital storage device. (Col. 12, lines 17-28)*

Beckert teaches these features.

13. Regarding claim 19, the further limitation of claim 10, Beckert teaches a power supply with these features (Col. 13, line 65 – Col. 14, line 28).

14. Regarding claim 20, the further limitation of claim 19, see the preceding argument with respect to claim 19. Beckert teaches a power supply with a low-voltage monitor and minimizes the power to the audio system (Col. 14, line 57 – Col. 15, line 3).

15. Regarding claim 21, see the preceding argument with respect to claims 10 and 14. Beckert teaches a system that allows a user to select data to be received wirelessly from a server. Beckert teaches that applications can be downloaded along with other data, wherein it is inherent that other data that is useful to this system is audio.
16. Regarding claim 24, see the preceding argument with respect to claims 10 and 14. Beckert teaches an audio system with these features.
17. Regarding claim 25, see the preceding argument with respect to claims 10 and 14. Beckert teaches an audio system with these features.

### ***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
19. Claims 1, 3-9, 13, 16, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckert.
20. Regarding claim 1, see Beckert  
  
*An audio system for use in a vehicle for the playback of audio data by a sound amplification system of the vehicle, the audio system comprising:*
  - (a) *a dynamic random access memory (DRAM) that stores the audio data for playback; (Col. 2, lines 20-29 and Col. 7, lines 26-36)*
  - (b) *an audio playback device that reads the audio data from the DRAM and converts it to a form which can be output to the vehicle's sound amplification system; (Col. 3, lines 20-28)*
  - (c) *an audio acquisition device that receives the audio data to be stored in the DRAM; and (Col. 5, line 63 – Col. 6, line 6 and Col. 6, lines 56-65)*

*(d) a power supply system between the vehicle's electrical system and the audio system, the power supply system supplying power to the audio system consistently including when the vehicle is not in use.* (Col. 13, line 65 – Col. 14, line 28)

Beckert teaches an audio system for the playback of audio in a vehicle comprising these features, wherein the audio is stored temporarily in buffers comprised of SRAM and system memory comprised of DRAM. Beckert does not teach a system that stores information on DRAM in the same fashion as it stores information on, for instance, a hard drive, however it is well-known that "Ramdrives" or "Ramdisks" can be created in the memory of a computer running an operating system as taught by Beckert. It would have been obvious for one of ordinary skill in the art to combine the teachings of Beckert with a "Ramdrive" for the purpose of utilizing very fast access times. The access time of DRAM is typically hundreds to thousands times faster than magnetic drives' access times.

21. Regarding claim 3, the further limitation of claim 1, see Beckert

*... wherein the audio playback device comprises an integrated unit including a conventional vehicle radio, a digital audio playback device that records audio data to and reads audio data from said DRAM, and an audio amplifier that amplifies outputs of said vehicle radio and said audio playback device for output to the vehicle's sound amplification system.* (Col. 12, lines 17-28)

Beckert teaches these features and the audio amplifier is inherent in the design of this system (Col. 1, lines 14-20).

22. Regarding claim 4, the further limitation of claim 1, see the preceding argument with respect to claim 13. Beckert teaches these features.

23. Regarding claim 5, the further limitation of claim 1, see the preceding argument with respect to claim 3.

*... wherein said audio acquisition device comprises a radio receiver/demodulator that receives broadcast analog audio signals, converts the received audio signals into digital audio signals, and encodes the digital audio signals for storage in said DRAM.*

Beckert teaches the capture of AM/FM signals.

24. Regarding claim 6, the further limitation of claim 1, see the preceding argument with respect to claim 3. Beckert teaches a device that receives analog radio signals (i.e. AM and FM), and Beckert teaches a device that receives digital broadcast signals (i.e. wireless internet) (Col. 5, line 63 – Col. 6, line 6).

25. Regarding claim 7, the further limitation of claim 1, see the preceding argument with respect to claim 6. Beckert teaches the use of wireless internet, and it is inherent that a local computer or media server can be available as a resource on the internet.

26. Regarding claim 8, the further limitation of claim 1, see the preceding argument with respect to claim 3. Beckert teaches the capture of audio from a compact disc (Col. 12, lines 49-60).

27. Regarding claim 9, the further limitation of claim 1, see the preceding argument with respect to claim 1, see Beckert

*... wherein said power supply system includes a power supply switch and a low-voltage monitor that detects a power output of the vehicle's electrical system and controls said power supply switch to selectively minimize or remove power to said audio system to prevent excessive drain on the vehicle's electrical system. (Col. 14, line 57 – Col. 15, line 3)*

Beckert teaches a power supply that minimizes power to the device.

28. Regarding claim 13, the further limitation of claim 10, see the preceding argument with respect to claim 12. Beckert teaches that the system can be located in any suitable location instead of being integrated into the dashboard. It is well known to place a CD changer in the trunk of a vehicle, beneath a seat, or in the center console

between seats. It is also well known to use an FM transmitter to transmit the audio to the conventional vehicle audio system. It would have been obvious for one of ordinary skill in the art to modify Beckert using these well-known techniques for the purpose of avoiding space limitations imposed by integrating the system in the dashboard.

29. Regarding claim 16, the further limitation of claim 10, see the preceding argument with respect to claim 14. Beckert teaches the use of a wireless Internet connection, but does not specifically teach that the wireless connection conforms to a standard. The office takes *Official Notice* that the wireless connection conforms to an IEEE 802.11 standard. It would have been obvious for one of ordinary skill in the art to combine the teachings of Beckert and an IEEE 802.11 standard for the purpose of greater compatibility.

30. Regarding claim 26, see the preceding argument with respect to claim 1. Beckert teaches an audio system which uses DRAM as memory in a computer.

31. Regarding claim 27, the further limitation of claim 26, see the preceding argument with respect to claims 6 and 7. Beckert teaches a wireless connection.

32. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckert as applied to claim 1 and 10 respectively above, and further in view of George, U.S. Pat. No. 6,317,657.

33. Regarding claim 2, the further limitation of claim 1, see George  
... wherein said DRAM comprises a synchronous DRAM (SDRAM) and an SDRAM controller having a low-power self-refresh mode whereby the SDRAM may retain its contents but cannot be accessed by the audio playback device. (Col. 6, lines 27-47)

Beckert teaches the features of claim 1, but does not teach the use of SDRAM. George teaches the use of SDRAM and a battery backup for a low-power self-refresh mode. It would have been obvious for one of ordinary skill in the art to combine the teachings of Beckert and George for the purpose of using the faster SDRAM as the random access memory in the system.

34. Regarding claim 11, the further limitation of claim 10, see the preceding argument with respect to claim 2. Beckert teaches the features in claim 1, but does not teach the use of SDRAM. George teaches the use of SDRAM with a backup power supply.

35. Claims 17, 18, 22, 23, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckert as applied to claim 10 above, and further in view of the SimpleAuto “Wireless, digital audio receiver for the car” (hereinafter SimpleAuto).

36. Regarding claim 17, the further limitation of claim 10, see SimpleAuto  
*... wherein said computer or media server stores a library of digital audio and includes a software interface that permits a user to select audio selections from said library for transmission to said audio system for storage in said digital storage device at predetermined times or at predetermined time intervals.* (p. 1, last lines of the first paragraph)

The teachings of Beckert include a software interface, but they do not teach the step of transmitting audio at predetermined times. SimpleAuto teaches “New Content is automatically updated and streamed wirelessly to the car.” The automatic method inherently transmits at predetermined times. It would have been obvious for one of ordinary skill in the art to combine the teachings of Beckert and SimpleAuto for the purpose of automated backup or updating.

37. Regarding claim 18, the further limitation of claim 17, see the preceding argument with respect to claim 17. The office takes *Official Notice* that a computer can be remotely controlled.
38. Regarding claim 22, the further limitation of claim 21, see the preceding argument with respect to claim 18. The combination of Beckert and SimpleAuto teach this feature.
39. Regarding claim 23, the further limitation of claim 22, see the preceding argument with respect to claim 18. The combination of Beckert and SimpleAuto teach the step of transmitting data wirelessly.
40. Regarding claim 28, the further limitation of claim 27, see the preceding argument with respect to claim 18. The combination of Beckert and SimpleAuto teach the step of transmitting at predetermined times.

### ***Conclusion***

41. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hatano et al, U.S. Pat. No. 5,191,500 – Teaches an automobile power supply,

Berenguel et al., U.S. Pat. No. 5,241,508 – Teaches the use of Ramdisks,

Beckert et al., U.S. Pat. No. 5,794,164 – Mentioned in the primary Beckert reference,

Benyamin et al., U.S. Pat. No. 6,721,489 – Teaches a playlist manager for use in music server, and

Beckert et al., U.S. Pat. No. 6,862,651 – similar to the other Beckert references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel R. Sellers whose telephone number is 571-272-7528. The examiner can normally be reached on Monday to Friday, 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DRS



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